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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/812,205	03/19/2001	Jurgen Bieber	2001P 09995 US	9617

23373 7590 04/16/2004  
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EXAMINER
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ZHEN, LI B

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 04/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/812,205

Applicant(s)

BIEBER, JURGEN

Examiner

Li B. Zhen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2004.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-6 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,2 and 4-6 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 12 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. Claim 3 has been cancelled. Claims 1, 2 and 4 – 6 are pending in the application.

***Claim Rejections - 35 USC § 101***

2. Claims 1, 2 and 4 – 6 are rejected under 35 U.S.C. 101 because they are directed to non-statutory subject matter.
3. Claims 1, 2 and 4 – 6 are directed to method steps which can be practiced mentally in conjunction with pen and paper, therefore they are directed to non-statutory subject matter. Specifically, as claimed, it is uncertain what performs each of the claimed method steps. Moreover, each of the claimed steps, inter alia, providing, deploying, and independently controlling, can be practiced mentally in conjunctions with pen and paper. The claimed steps do not define a machine or computer implemented process [see MPEP 2106]. Therefore, the claimed invention is directed to non-statutory subject matter. (The examiner suggests applicant to change “method” to “computer implemented methods” in the preamble to overcome the outstanding 35 U.S.C. 101 rejection).

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**5. Claims 1, 2, and 4 – 6 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,167,464 to Kretschmann.**

6. As to claim 1, Kretschmann teaches a method of independent process control [an industrial control system for controlling the operation of a process executed on a plurality of separate machines; col. 2, lines 23 – 65] comprising the steps of:

providing an automated production process [industrial control system; col. 4, lines 25 – 33] control program [control program] on a network server [a control program executing on the central processor 12 to control and coordinate the machines 18 by means of electrical input and output signals; col. 4, lines 25 – 45];

deploying a plurality of parallel instances [upon identification of the HMI 28 by the central processor 12, the central processor 12 may identify one or more applications (using a matrix 66) to be downloaded to the HMI; col. 7, lines 20 – 33] of the control program to a respective plurality of thin client terminals [portable HMI] over a network [portions of the task 64 may be loaded into the portable HMI 28 as the applications 48 after a task has been identified; col. 6, lines 43 – 67]; and

independently controlling a process from each of the plurality of thin terminals [an industrial control system for controlling the operation of a process executed on a plurality of separate machines; col. 2, lines 23 – 65], thereby providing multiple terminal

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server-client operation [mobile human machine interface for a monitoring operation of a spatially distributed control system in a factory; see abstract].

7. As to claim 2, Kretschmann teaches an intermediate software layer for creating the plurality of instances of the control program [the processor 12 receives the location data from the tag 26 and the user identification code...the column associated with the particular machine identified by the tag 26 will be referred to and a task identified making an assumption of a default user...The particular task 64 will then be executed to transmit to the portable HMI 28 the necessary I/O or control program information associated with that particular machine 18 identified and the task selected by the matrix 66; col. 6, lines 1 – 35].

8. As to claim 4, Kretschmann teaches the plurality of the clients utilize at least one of a plurality of different operating systems [memory 42 of the HMI 28 holds a compact operating system 46 such as the Windows CE type operating system manufactured by Microsoft Corporation; col. 5, lines 1 – 12].

9. As to claim 5, Kretschmann teaches the plurality of different operating systems comprise Windows [memory 42 of the HMI 28 holds a compact operating system 46 such as the Windows CE type operating system manufactured by Microsoft Corporation; col. 5, lines 1 – 12], Linux, Unix, and Macintosh operating systems.

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10. As to claim 6, Kretschmann teaches at least one of the plurality of client terminals is a flying client having a wireless connection to the network [the portable HMI 28 includes a first radio antennae 31 for communicating with the transceiver 30 via an RF link 29 and a second radio antenna 32 communicating with the tag 26; col. 4, lines 50 – 62].

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

12. **Claims 1, 2 and 4 – 5 are rejected under 35 U.S.C. 102(a) as being anticipated by “Software Models for Standardizing the Human-Machine Interface Connection to a Machine Controller” (hereinafter Michaloski).**

13. As to claim 1, Michaloski teaches a method of independent process control [in manufacturing, the Human Machine Interface (HMI) handles the connection between the human and a machine controller...HMI is responsible for supervisory command and control as well as status monitoring; Background, p. 1] comprising the steps of:

providing an automated production [in manufacturing, the Human Machine Interface (HMI) handles the connection between the human and a machine controller; Background, p. 1] process control program on a network server [each Controller

component provides its own data services through a proxy server; Distributed Components, p. 6 – 7];

deploying a plurality of parallel instances of the control program [In a distributed component-based approach, the HMI could directly access any Controller component; Distributed Components, p. 6 – 7] to a respective plurality of thin client terminals over a network [A distributed approach assumes that each Controller component exposes COM interface; p. 7, 1<sup>st</sup> paragraph]; and

independently controlling a process from each of the plurality of thin terminals [primary benefit to the decentralized COM components would be to increase in reusability of components; p. 7, 2<sup>nd</sup> paragraph], thereby providing multiple terminal server-client operation [since COM components are location transparent, the HMI can bind to a COM component anywhere, be it in-process, local-process, or remote process; p. 7, 1<sup>st</sup> paragraph].

14. As to claim 2, Michaloski teaches an intermediate software layer for creating the plurality of instances of the control program [component-based software can be created using many different programming languages...Component based technology, such as the Component Object Model (COM) or the Common Object Request Broker Architecture (CORBA), would allow an HMI to communicate with the Controller in a programming language-independent, object-oriented manner. The API are defined in a neutral programming language, such as the Interface Definition Language (IDL) and translated into the different programming languages; Component Solutions, p. 5].

15. As to claims 4 and 5, Michaloski teaches the plurality of the clients utilize at least one of a plurality of different operating systems [HMI API's should be platform independent; p. 3, 2<sup>nd</sup> paragraph] and the plurality of different operating systems comprise Windows [ActiveX components are network independent and can be used in Windows applications; Distributed Components with Presentation Views, p. 7], Linux, Unix [Unix shared library; Legacy Solutions, p. 3], and Macintosh operating systems.

### ***Conclusion***

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,308,205 to Carcerano teaches a browser-based network management allowing administrators to use web browser on user's workstation to view and update configuration of network devices.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (703) 305-3406. The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703) 305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.




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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Li B. Zhen  
Examiner  
Art Unit 2126

lbz  
April 13, 2004



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